

CLAIMS

1. Quality of service management method in a packet mode mobile communication network, characterised in that, in order for a service to be executed by a subscriber to the network to which a data stream  
5 corresponds, it includes a stage that consists in determining an overall priority level (NPG) associated to the data stream based on at least one quality of service parameter corresponding to a subscriber priority level and at least one quality of service  
10 parameter related to the type of service.

2. Method according to claim 1, characterised in that it includes a stage that consists in determining, based on said overall priority level (NPG), at least one quality of service process to be applied to the  
15 data stream.

3. Method according to claim 2, characterised in that it includes a stage that consists in, in the case of a network overload, applying said quality of service process to the data stream, taking into account the  
20 overall priority level related to this data stream and the overall priority levels related to the data streams

that correspond to other subscribers found on the network.

4. Method according to any of claims 1 to 3, characterised in that the overall priority level  
5 related to a data stream is determined according to a table that specifies an overall priority level value for each combination of the two quality of service parameters that correspond, respectively, to a subscriber priority level and a service type.

10 5. Method according to claim 4, characterised in that the network is managed by an operator, and the overall priority levels can be configured by said network operator.

6. Method according to any of claims 1 to 5,  
15 characterised in that the mobile network includes a core network (RC) and an access network (RA, UTRAN) and is implemented by at least some nodes of the group that includes a service node (SGSN) of the core network that ensures the management of the communication link with  
20 an access network, a service node (GGSN) of the core network that ensures the interconnection with an external network, and a management node of the access network radio resources (BSS/RNC).

7. Method according to any of claims 1 to 6,  
25 characterised in that the quality of service parameter that corresponds to the subscriber priority level used for determining the overall priority level (NPG) includes one of the parameters of the group that includes:

30 - the "Allocation Retention Priority" quality of service parameter,

- the "Priority Level" sub-parameter of the "Allocation Retention Priority" quality of service parameter,

- the "Precedence Class" quality of service  
5 parameter,

said quality of service sub-parameters and parameters are defined within the framework of the 3GPP telecommunications standard.

8. Method according to any of claims 1 to 7,  
10 characterised in that the quality of service parameter related to the type of service used to determine the overall priority level (NPG) includes the "Traffic Class" quality of service parameter, defined within the framework of the 3GPP telecommunications standard.

15 9. Method according to claim 8, characterised in that the quality of service parameter related to the type of service used to determine the overall priority level (NPG) further includes the "Traffic Handling Priority" quality of service parameter, defined within  
20 the framework of the 3GPP telecommunications standard to associate a priority level to the data stream on the network when the data stream corresponds to an interactive type service.

10. Device for implementing the method of any of  
25 claims 1 to 9, arranged, for the execution of a service by a subscriber of the network to which a data stream corresponds, in order to determine an overall priority level (NPG) associated to the data stream according to at least one quality of service parameter that  
30 corresponds to a subscriber priority level and at least

one quality of service parameter related to the type of service.

11. Device according to claim 10, characterised in that it is arranged in order to determine, according to  
5 the overall priority level (NPG) associated with a data stream, at least one quality of service process to be applied to this data stream.

12. Device according to any of claims 10 and 11, characterised in that it is arranged in order to apply  
10 a quality of service process to a data stream, whilst taking into account the overall priority level associated to this data stream and the overall priority levels associated to the data streams that correspond to other subscribers on the network.

13. Device according to any of claims 10 to 12, characterised in that it is associated to a behaviour  
15 table that specifies a value of the overall priority level for each combination of the two quality of service parameters corresponding, respectively, to a subscriber priority level and a type of service.  
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14. Device according to any of claims 10 to 13, characterised in that the overall priority levels can be configured by a network operator.

15. Service node (SGSN) of a core network (RC)  
25 that ensures the management of the communication link with the access network (RA, UTRAN) according to the device of any of claims 10 to 14.

16. Service node (GGSN) of a core network (RC)  
that ensures the interconnection with an external  
30 network, according to the device of any of claims 10 to 14.

17. Radio resource management node (BSS/RNC) of an access network, according to the device of any of claims 10 to 14.